

**AMENDMENTS TO THE SPECIFICATION:**

(Since the Office Action refers to the paragraphs cited in the publication of the application 2004-0135289, the amendment below refers to the publication paragraph numbers cited in the Office Action.)

<sup>35</sup>  
[0065] Along the printing paper feeding path, a paper feed guide 105, paper feed rollers 106, a driven roller 107 that is set in the face of paper feed rollers 106, a printing stage 108 that is set aslant, the carriage 1 that is set in the face of the printing stage 108, a paper ejecting guide 109, and a paper ejecting roller 110 that is set in the face of the paper ejecting guide 109 is are arranged in the order from the side of the paper feeding unit 210 (which corresponds to the upper right side in FIG. 6).

IDC-a1,AMD

<sup>37</sup>  
[0067] A plurality of sub-tanks 3 are mounted respectively on two layers of the sub-tank plates 1A, 1B on the carriage 1. Each sub-tank 3 has a valve 4. The print head 6 and the sub-tank 3 are connected by an ink supplying channel 5 equipped with a valve 4. In this embodiment, one print head 6 includes 6 nozzle groups. Accordingly, 6 sub-tanks 3a to 3f (see FIG. 2) are connected to one print head 6 (See FIG. 2). Ink supply to each of the 6 nozzle groups can be stopped separately by closing each valve 4 properly.

IDC-a2,AMD

IDC-a3,AMD,M

<sup>53</sup>  
[0087] FIG. 9 is a flow chart that shows the procedure for supplying ink from the main tank 9 to the sub-tank 3 while the printer is executing the printing. In Step S10, if the CPU 41

IDC-a3,AMD,M

detects the sub-tank 3 of which the ink remaining amount is below the lower limit Th1, the CPU 41 decides the sub-tank group to which the detected sub-tank 3 belongs in Step S20.

<sup>56</sup>  
[0098] After that, in Step S60, the CPU 41 drives the air pressure pump 921 so that it supplies the air at the set pressure Pa, and opens the valve 926 to supply ink from the main tank 9 to the sub-tank 3.

IDC-a4,AMD

IDC-a5,AMD,M

<sup>62</sup>  
[0097] FIG. 10 shows the flowchart of the procedure for supplying ink from the main tank 9 to sub-tank 3 after the printing of one image is completed and before the printing of another image starts. In Step S110, the CPU 41 detects the sub-tank 3 of which the ink remaining amount is below the second threshold Th2. In Step S120, the CPU 41 provides instruction to supply ink from the main tank 9 to the detected sub-tank 3 which is connected to the print head in the area of the sub-tank group G1. In Step S130, the CPU 41 supplies ink from the main tank 9 to the detected sub-tank 3 which is connected to the print head in the area of the sub-tank group G2. In Step S140, the CPU 41 supplies ink from the main tank 9 to the detected sub-tank 3 which is connected to the print head in the area of the sub-tank group G3.

<sup>63</sup>  
[0098] FIG. 11 shows the flowchart of the procedure for supplying ink from the main tank 9 to sub-tank 3 of each sub-tank group in Steps S120 to S140 of FIG. 10. When ink is supplied to the sub-tank 3 of each sub-tank group, in Step S152, the CPU 41 counts Nt that is the number of sub-tanks 3 in the each sub-tank group of which the ink remaining amount is below

the second threshold Th2. Then the CPU 41 sets the value Pa of the pressure of the compressed air supplied by the air pressure pump 921.

<sup>64</sup>  
[0099] FIG. 12 shows the table for defining the value of the pressure of compressed air supplied by the air pressure pump 921. In Step S154, the value Pa of the pressure of the compressed air supplied by the air pressure pump 921 is decided according to the type G1 to G3 of sub-tank group and the number of sub-tanks 3 in which ink is to be replenished. The total number of sub-tanks belonging to each sub-tank group is 5 or 6. The value of the pressure of compressed air is defined according to the number of the sub-tanks to be supplied the ink, i.e. 1 to 5 or 6 as shown in FIG. 12. The 9 characters of P11 to P33 represent the pressure values respectively. The pressure values in the same column (such as P11, P21, P31) are each lower than the value underneath (that is, the values increase in descending order). The pressure values in the same row (such as P21, P22, P23) are each lower than the preceding value (greater on the left, lower on the right) Furthermore, P11>P32, and P12>P33.

<sup>65</sup>  
[0100] After that, in Step S156 of FIG. 11, CPU 41 drives the air pressure pump 921 so that it operates with the pressure Pa set in the Step 154, opens the valve 926 and supplies the ink from the main tank 9 to sub-tank 3.

IDC-a5,AMD,M